What is claimed is:

Sub-B8

1. A method of providing a display output for at least two display devices using a single graphic controller system, the method comprising:

providing a first display controller able to read from a graphics memory at least two first surfaces into at least two pixel paths , convert at least one of the at least two first surfaces, scale at least one of the at least two first surfaces, and combine (blend and/or overlay) the at least two first surfaces, said first surfaces containing any one of RGB and YUV format video ;

providing a second display controller able to read from a graphics memory at least two second surfaces into at least two pixel paths, convert at least one of the at least two second surfaces, scale at least one of the at least two second surfaces, and combine (blend and/or overlay) the at least two second surfaces, said second surfaces containing any one of RGB and YUV format video;

causing said first display controller to select and read said first surfaces, convert said first surfaces into a like first format at least when said first surfaces are not all in said like first format, scaling at least one of said first surfaces, combining said first surfaces to obtain a combined first surface, and outputting said combined first surface to provide a first output stream of pixel data;

causing said second display controller to select and read said second surfaces, convert said second surfaces into a like second format at least when said second surfaces are not in said like second format, scaling at least one of said second surfaces, combining said second surfaces to obtain a combined second surface, and outputting said combined second surface to provide a second output stream of pixel data,

whereby flexibility is provided by selection of said first and second surfaces as well as scaling and blending of said first and second surfaces, whether said surfaces are in RGB format, YUV format or mixed RGB/YUV format.

2. The method as claimed in claim 1, wherein the first output stream and the second output stream are fed into a first multiplexer and a second multiplexer, an output of the first multiplexer being fed into a first display, and an output of the second multiplexer being fed into a second display, the method further comprising causing said multiplexers to select a desired one of said output streams for display on said first and second displays.

Sub A9

3. The method as claimed in claim 1, wherein:

said first display controller reads two first surfaces, has at least one controllable color space converters outputting a selected one of RGB and YUV format video, and one scaling units scaling an output of said said at least one color space converters and another scaling unit independently scaling the unconverted surface, and a combining unit receiving an output of said two scaling units,

the method comprising causing said two scaling units to scale each of said two first surfaces.

4 The method as claimed in claim 1, wherein:

said first display controller reads two first surfaces, has at least one controllable color space converters outputting a selected one of RGB and YUV format video, and one combining unit combining an output of said at least one color space converters and another surface, and a scaling unit receiving an output of said combining unit,

the method comprising causing said scaling unit to scale said combined surfaces.

Sub A10

5 The method as claimed in claim 1, wherein:

said second controller reads two second surfaces, has at least one controllable color space converters outputting a selected one of RGB and YUV format video, and one scaling units scaling an output of said at least one color space converters and another scaling unit independently scaling the un

converted surface, and a combining unit receiving an output of said two scaling units,

the method comprising causing said two scaling units to scale each of said two second surfaces.

6 The method as claimed in claim 1, wherein:

said second display controller reads two second surfaces, has at least one controllable color space converters outputting a selected one of RGB and YUV format video, and one combining unit combining an output of said at least one color space converter and another surface, and a scaling unit receiving an output of said combining unit,

the method comprising causing said scaling unit to scale said combined surfaces.

Sub A11 7. The method as claimed in claim 1, wherein:

said single graphic controller system comprises a drawing engine scaler responsive to a scaling command to pre-scale at least one surface in said graphics memory and output a scaled version in a scaled surface in said graphics memory; and

one of said steps of causing said first display controller and causing said second display controller comprises one of scaling said at least one of said first and second surfaces, respectively, using said drawing engine scaler and reading said at least one of said first and second surfaces, respectively, from said scaled surface wherein at least one of said first and second controllers does not have at least one of said backend scalers.